

Abstract

The device comprises a voltage divider (R_{v1} , R_{v2}) to whose two terminals the oscillator signal with a phase position that is mutually opposed is supplied until, in the instance of a switched-on probe heating, the voltage ($V_{R_{pvs}}$) that is proportional to the probe internal resistance (R_{pvs}) falls below a predetermined set value (set), whereby, at this point in time, the output signal of the oscillator (SZ) is supplied to both terminals of the voltage divider (R_{v1} , R_{v2}) with the same phase position (area 1) thus effecting an amplitude change-over (amplitude amplification).